

Claims

1. Method for the manufacture of a masked solid support suitable for array analysis comprising the steps of:

- (i) providing a solid porous support suitable for array analysis having first and second surfaces, said solid porous support having channels extending from said first surface to said second surface;
- (ii) depositing at a predefined area on said porous solid support a polymeric material to said first surface, said polymeric material comprising a co-solvent so as to temporarily decrease the viscosity and/or rate of polymerisation of the polymeric material during the step of depositing;
- (iii) allowing said polymeric material to enter said channels of said solid porous support;
- (iv) removing said co-solvent by contacting said first surface with a wash solution and extracting the co-solvent/wash solution through said channels so as to restore the polymerisation rate of the polymer material within said channels, whereby a mask on said solid support is formed.

2. The method according to claim 1, wherein said co-solvent is chosen from the group comprising glycols and glycol ethers.

3. The method according to claim 1 or 2, wherein said mask forms a grid of polymeric material through said solid porous support.

4. The method according to any of claims 1 to 3, wherein said polymeric material comprises an agent, said agent affecting the mask properties.

5. The method according to claim 4, wherein said mask properties are chosen from the group comprising electricity conduction, colour, magnetical charge, hydrophobicity, adhesion/absorption of microorganisms, adhesion/adsorption by tissue culture cells, and repellent/attracting property.

6. The method according to any of claims 1 to 5, wherein said polymeric material is a latex polymer.

7. The method according to any of claims 1 to 6, wherein said depositing step is by a means chosen from the group comprising a high precision x-y-z pipettor, inkjet printer, and manual handling.

5 8. The method according to any of claims 1 to 7, wherein said solid porous support is a flow-through support.

9. The method according to any of the claims 1 to 8, wherein said solid porous support is a metal oxide support.

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10. The method according to claim 9, wherein said metal oxide is aluminium oxide.

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11. A masked solid porous support obtainable by a method according to any of claims 1 to 10 suitable for array analysis comprising first and second surfaces, said solid porous support having channels extending from said first surface to said second surface; wherein at a predefined area on said porous solid support a polymeric material is present, wherein said polymeric material is within the channels and forms a mask on the solid porous support.

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12. The solid porous support according to claim 11, wherein said mask forms a grid of polymeric material through said solid porous support.

13. The solid porous support according to claim 11 or 12, wherein said polymeric material comprises an agent, said agent affecting the mask properties.

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14. The solid porous support according to any of claims 11 to 13, wherein said polymeric material is a latex polymer.

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15. The solid porous support according to any of claims 11 to 14, wherein said solid porous support is a flow-through support.

16. The solid porous support according to any of claims 11 to 15, wherein said solid porous support is a metal oxide support.

17. The solid porous support according to claim 17, wherein said metal oxide is aluminium oxide.
18. Use of a solid porous support according to any of claims 11 to 18 for microarray analysis.
- 5 19. Use of a solid porous support according to any of claims 11 to 18 for cell-based assays.
- 10 20. Use of a solid porous support according to any of claims 11 to 18 for drug screening assays.
21. A kit for array analysis comprising a solid porous support according to any of the claims 11 to 18.